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## **TECHNICAL SUPPLEMENT 3: BUSINESS AND NEIGHBORHOOD ACCESS**

### **Albuquerque Rapid Transit Project**

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**Prepared for:**



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**October 2014**

## Summary of Access Changes with the ART System

The proposed Albuquerque Rapid Transit (ART) project will locate rapid vehicle lanes within the street median for most of the project area. These lanes will be access-controlled with access limited to rapid vehicles and emergency response vehicles. Other vehicles — passenger cars and delivery vehicles — will not be allowed to cross the rapid vehicle lanes except at signalized intersections. Consequently, left-turn access to some side streets and individual driveways along Central Avenue will be altered. This paper summarizes the access changes for each major segment of Central Avenue within the project limits.

### 1. 98<sup>th</sup> Street to Unser Boulevard

#### a. Existing Access Condition

- i. Raised median with median breaks provided at eight locations. See Figure 1.

#### b. Proposed Access

- i. The proposed service in this segment will operate in the inside (left) lanes with mixed flow traffic. No new stations are proposed. Existing left-turn access is not affected in this segment.

### 2. Unser Boulevard to Coors Boulevard

#### a. Existing Access Condition

- i. Raised median with median breaks provided at seven locations. See Figure 2.

#### b. Proposed Access

- i. The proposed service in this segment will operate in the inside (left) lanes with mixed flow traffic. The station will be located in an existing park and ride lot in the northwest corner of Unser Boulevard and Central Avenue. Existing left-turn access is not affected.

### 3. Coors Boulevard to Old Coors Road

#### a. Existing Access Condition

- i. Raised median with median breaks provided at **fourteen locations** plus one emergency access location for fire response. Side streets are offset, a condition that increases the number of access points. Access is generally limited to side streets, although **nine businesses** can be accessed by left-turns from medians. All other businesses use side streets and/or U-turns for access. See Figure 3 for the names and locations of the properties with direct left-turn access.

#### b. Proposed Access

- i. Left-turn access in the westbound direction is proposed to be consolidated to one location, not including Coors Boulevard and Old Coors Road. **A left turn lane is proposed at 59<sup>th</sup> Street (G)** resulting in a distance of 0.26 miles between Old Coors Road and 59<sup>th</sup> Street. Vehicles destined to businesses and side streets on the south side of Central Avenue can make U-turns at 59<sup>th</sup> Street and Coors

Boulevard, or they can turn left at these streets to access Churchill Road and then access the neighborhoods and residential streets south of Central Ave.

- ii. Left-turn access in the eastbound direction is proposed to be **consolidated at 63<sup>rd</sup> Street (I) and Yucca Drive** resulting in a distance of 0.21 miles from Coors Blvd. to 63<sup>rd</sup> Street and 0.48 miles from 63<sup>rd</sup> Street and Yucca Drive. Vehicles destined to businesses and side streets on the north side of Central Avenue can make U-turns at 63<sup>rd</sup> Street and Yucca Drive to access the businesses along the north side of Central Avenue, or they can turn left at these locations to access Avalon Road and then access the neighborhoods and residential streets north of Central Ave.
- iii. The proposed access plan will result in **two additional signalized intersections** in this segment of Central Avenue.

#### 4. Old Coors Road to Sunset Drive

##### a. Existing Access Condition

- i. Raised median with median breaks provided at eleven locations not including Old Coors Road and Atrisco Drive. Signalized intersections include Coors Boulevard, 47<sup>th</sup> Street, Atrisco Road, and Sunset Drive. Left-turn access is generally limited to side streets, although **three retail properties, a mobile home park, one restaurant, and an American Legion Post** also have direct left-turn access. All other businesses and destinations use side streets and/or U-turns for access. The names and locations of the properties with direct left-turn access are shown in Figure 4.

##### b. Proposed Access

- i. Left-turn access in both the westbound and eastbound direction is proposed at Old Coors Road, 52<sup>nd</sup> Street, 47<sup>th</sup> Street, the shopping center driveway labeled J in Figure 4, Atrisco Drive, and Sunset Drive. This will provide left-turn access to the properties along both sides of Central Avenue at a spacing of 0.15 miles from Old Coors to 52<sup>nd</sup> Street, 0.4 miles from 47<sup>th</sup> Street to Old Coors Road, 0.2 miles from the shopping center to 47<sup>th</sup> Street, 0.15 miles from Atrisco Drive to the shopping center site, and 0.15 miles from Sunset Drive to Atrisco Drive.
- ii. The proposed access plan will result in **two additional signalized intersections** in this segment of Central Avenue.

#### 5. Tingley Drive to San Pasquale

##### a. Existing Access Condition

- i. Raised median with median breaks provided at eight locations not including Tingley Drive, Rio Grande Boulevard, and San Pasquale. Four signalized intersections are present including Tingley Drive, New York Avenue, Rio Grande Boulevard, and San Pasquale. Left-turn access includes three side streets, **an apartment complex, one restaurant, three small commercial properties, and a police substation**. All other businesses and destinations use U-turns for access.

See Figure 5 for the names and locations of the properties with direct left-turn access.

b. *Proposed Access*

- i. Left-turn access in both the westbound and eastbound direction is proposed at the existing signalized intersections (Tingley Drive, New York Avenue, Rio Grande Boulevard, and San Pasquale). This results in left-turn and U-turn spacing of 0.24 from Tingley Drive to New York Avenue, 0.36 miles from New York Avenue to Rio Grande Boulevard, and 0.18 miles from Rio Grande Boulevard to San Pasquale.

6. **San Pasquale to 10<sup>th</sup> Street**

a. *Existing Access Condition*

- i. Left-turn access along this segment of Central Avenue is not controlled. A continuous two-way left turn lane is present throughout this segment of Central Avenue. Five signalized intersections are present including San Pasquale, Laguna Boulevard, 14<sup>th</sup> Street, 12<sup>th</sup> Street, and 10<sup>th</sup> Street. Seven side streets and a **variety of small offices, retail properties, housing, and a school** have direct left-turn access.

b. *Proposed Access*

- i. Left-turn access in both the westbound and eastbound direction is proposed at all five of the existing signalized intersections. These locations result in left-turn and U-turn spacing of 0.3 miles from San Pasquale to Laguna Boulevard, 0.15 miles from Laguna Boulevard to 14<sup>th</sup> Street, 0.15 miles from 14<sup>th</sup> Street to 12<sup>th</sup> Street, and 0.15 miles from 12<sup>th</sup> Street to 10<sup>th</sup> Street.

7. **10<sup>th</sup> Street to 1<sup>st</sup> Street**

The proposed ART service will operate in mixed flow lanes through the Downtown area with curb-side stations. No changes to access will occur.

8. **1<sup>st</sup> Street to Locust Street (I-25 SB Frontage Road)**

a. *Existing Access Condition*

- i. Raised median with median breaks provided at six locations not including Broadway Boulevard and Locust Street. Three signalized intersections are present including Broadway Boulevard, Edith Boulevard, and Locust Street. Left-turn access includes six side streets. **No properties have direct left-turn access**; all are accessed via side streets and U-turns. See Figure 8 for the locations with left-turn access.

b. *Proposed Access*

- i. Left-turn access in both the westbound and eastbound direction is proposed at the existing signalized intersections (Broadway Boulevard, Edith Boulevard, and Locust Street). This provides left-turn and U-turn spacing of 0.15 miles from



Broadway Boulevard to Edith Boulevard, and 0.28 miles from Edith Boulevard to Locust Street.

#### 9. Oak Street (I-25 NB Frontage Road) to University Boulevard

##### a. Existing Access Condition

- i. Raised median with median breaks provided at five locations not including Oak Street and University Boulevard. Three signalized intersections are present including Oak Street, Cedar Street, and University Boulevard. Left-turn access includes four side streets and an emergency access drive into Presbyterian Hospital. No properties have direct left-turn access. See Figure 9 for the locations with left-turn access.

##### b. Proposed Access

- i. Left-turn access in both the westbound and eastbound direction is proposed at the existing signalized intersections (Oak Street, Cedar Street, and University Boulevard). In addition, limited left-in only access is proposed at the emergency vehicle access to Presbyterian Hospital. This provides left-turn and U-turn spacing of 0.15 miles from Oak Street to Cedar Street, and 0.4 miles from Cedar Street to University Boulevard. **As an alternative, left turn access is proposed at Mulberry Street and Spruce Street** to serve Presbyterian Hospital and the property to the north. This assumes the main hospital entrance at Cedar is relocated to Spruce. This approach would result in a spacing of 0.08 miles from Oak Street to Mulberry Street, 0.15 miles from Mulberry to Spruce, and 0.32 miles from Spruce to University Boulevard.

#### 10. University Boulevard to Girard

##### a. Existing Access Condition

- i. Raised median with median breaks provided at seven side streets and three signalized intersections (Yale, Cornell, and Stanford), not including University Blvd. and Girard Boulevard. **No properties have direct left-turn access into private driveways.** See Figure 10 for the locations with left-turn access.

##### b. Proposed Access

- i. Left-turn access in both the westbound and eastbound direction is proposed at two of the existing signalized intersections (Yale and Stanford), and University Boulevard and Girard Boulevard. Access spacing is 0.25 miles from University Boulevard to Yale Boulevard, 0.2 miles from Yale Boulevard to Stanford Drive, and 0.25 miles from Stanford Drive to Girard Blvd.
- ii. Left-turn access in the westbound direction will be provided at Cornell Drive and at two new signalized locations – Buena Vista Drive and Princeton Drive.

#### 11. Girard to Carlisle Boulevard

##### a. Existing Access Condition

- i. Raised median with median breaks provided at six side streets not including Girard Boulevard and Carlisle Boulevard. Two access points are signalized including Richmond Drive and Wellesley Drive. **No direct left-turn access exists into private driveways.** See Figure 11 for the locations with left-turn access.
- b. *Proposed Access*
  - i. Left-turn access in both the westbound and eastbound direction is proposed at the two signalized intersections (Richmond and Wellesley), and Girard Boulevard and Carlisle Boulevard. Access spacing is 0.13 miles from Girard Boulevard to Richmond Drive, 0.13 miles from Richmond Drive to Wellesley Drive, and 0.2 miles from Wellesley Drive to Carlisle Boulevard.

## 12. Carlisle Boulevard to Washington Street

- a. *Existing Access Condition*
  - i. Raised median with median breaks provided at seven side streets not including Carlisle Boulevard and Washington Street. Three of the intersections are signalized including Carlisle Boulevard, Morningside Drive, and Washington Street. **No direct left-turn access exists into private driveways.** See Figure 12 for the locations with left-turn access.
- b. *Proposed Access*
  - i. Left-turn access in both the westbound and eastbound direction is proposed at the three signalized intersections (Carlisle Boulevard, Morningside Drive, and Washington Street). Access spacing is 0.25 miles between each signalized intersection.

## 13. Washington Street to San Mateo

- a. *Existing Access Condition*
  - i. Raised median with median breaks provided at eight side streets not including Washington Street and San Mateo Boulevard. Three of the intersections are signalized including Washington Street, Monroe Street, and San Mateo Boulevard. **No direct left-turn access exists into private driveways.** See Figure 13 for the locations with left-turn access.
- b. *Proposed Access*
  - i. Left-turn access in both the westbound and eastbound direction is proposed at the three signalized intersections (Washington Street, Monroe Street, and San Mateo Boulevard). Access spacing is approximately 0.25 miles between each signalized intersection.

## 14. San Mateo to San Pedro

- a. *Existing Access Condition*
  - i. Raised median with median breaks provided at eight side streets not including San Mateo Boulevard and San Pedro Drive. In addition, **direct left-turn access exists for a large vacant lot and three commercial properties.** Three of the

intersections are signalized including San Mateo Boulevard, Alvarado Drive, and San Pedro Drive. See Figure 14 for the streets and commercial properties with left-turn access.

b. *Proposed Access*

- i. Left-turn access in both the westbound and eastbound direction is proposed at the three signalized intersections (San Mateo Boulevard, Alvarado Drive, and San Pedro Drive). Access spacing is approximately 0.25 miles between each signalized intersection.

## 15. San Pedro Drive to Louisiana Boulevard

a. *Existing Access Condition*

- i. Raised median with median breaks provided at three side streets, **two commercial properties, and a driveway entrance to the New Mexico State Fairgrounds**. Two intersections are signalized including San Pedro Drive and Louisiana Drive. See Figure 15 for the streets and commercial properties with left-turn access.

b. *Proposed Access*

- i. Left-turn access in both the westbound and eastbound direction is proposed at the two signalized intersections (San Pedro Drive and Louisiana Drive). Access spacing is approximately 0.5 miles between these two intersections.
- ii. Because of the distance between the two signalized intersections, **additional left-turn access is proposed at** Florida Street (C), which results in a spacing of approximately 0.25 miles. This would require coordination with the Fairgrounds management.

## 16. Louisiana Boulevard to Wyoming Boulevard

a. *Existing Access Condition*

- i. Left-turn access in this segment is controlled by a raised median. The proposed ART service in this segment consists of rapid vehicles operating in the inside (left) lane in a mixed flow condition. Left-turns will not be affected except at one location where rapid vehicle stations are proposed —the west side of the intersection at Wyoming Boulevard. The station at Wyoming Boulevard will block left-turn access at Wisconsin Street.

## 17. Wyoming Boulevard to Tramway Boulevard

a. *Existing Access Condition*

- i. Left-turn access in this segment is provided by a continuous two way left-turn lane. The proposed ART service in this segment consists of rapid vehicles operating in the inside (left) lane in a mixed flow condition. Left-turn access will not be affected excepted at the proposed station on the west side of the Eubank Boulevard intersection. This station will block left-turn access at Glorieta Street.

## Summary

The proposed project will affect left-turn access along Central Avenue. While most of the existing left-turn access is limited to public side streets, several driveways to businesses and vacant land parcels will be affected by the rapid vehicle lanes and station areas. Access to the side streets and properties on Central Avenue will be served by left-turns onto side streets and U-turns. In general, intersection spacing where u-turns can be made occurs at intervals of 0.25 miles or less. Additional access is recommended at three locations.

1. The area between Coors Boulevard and Yucca Drive. Without additional access, the distance between these two intersections is 0.7 miles; an unreasonable distance for the businesses and neighborhoods that use Central Avenue for access. Because the side streets in this area are offset, two new signals/intersections are recommended: one at 63<sup>rd</sup> Street to serve eastbound traffic and one at 59<sup>th</sup> Street to serve westbound traffic. This would result in an intersection spacing of 0.25 to 0.4 miles, depending on the direction of travel.
2. The segment from 47<sup>th</sup> Street to Atrisco Drive. Two large shopping centers are located in the area immediately west of Atrisco Drive. While one site is currently vacant, it is likely that redevelopment will occur. Given the size of these two properties, a significant volume of left turn demand exists and an additional access point is recommended. Additional access is also recommended at 52<sup>nd</sup> Street.
3. The segment from San Pedro Drive to Louisiana Boulevard. The distance between signalized intersections is 0.5 miles. The land use along the north side of Central Avenue includes the New Mexico State Fairgrounds, Race Track, and Casino. These uses generate significant traffic that requires access. An additional signalized intersection is recommended in this segment, the location of which should be determined in collaboration with the users of this site.





Figure 1: 98<sup>th</sup> Street to Unser Boulevard

- A – Westland Rd. (south side), frontage road (north side)

B – 94<sup>th</sup> Street (both sides)

C – Bridge Blvd. (south), frontage road (north)

D – 90<sup>th</sup> Street (north and south sides)
- E – 86<sup>th</sup> Street (south side)

F – Volcano Road (north side)

G – Undeveloped Shopping Center Driveway (south)

H – Transit Park and Ride Lot (north)



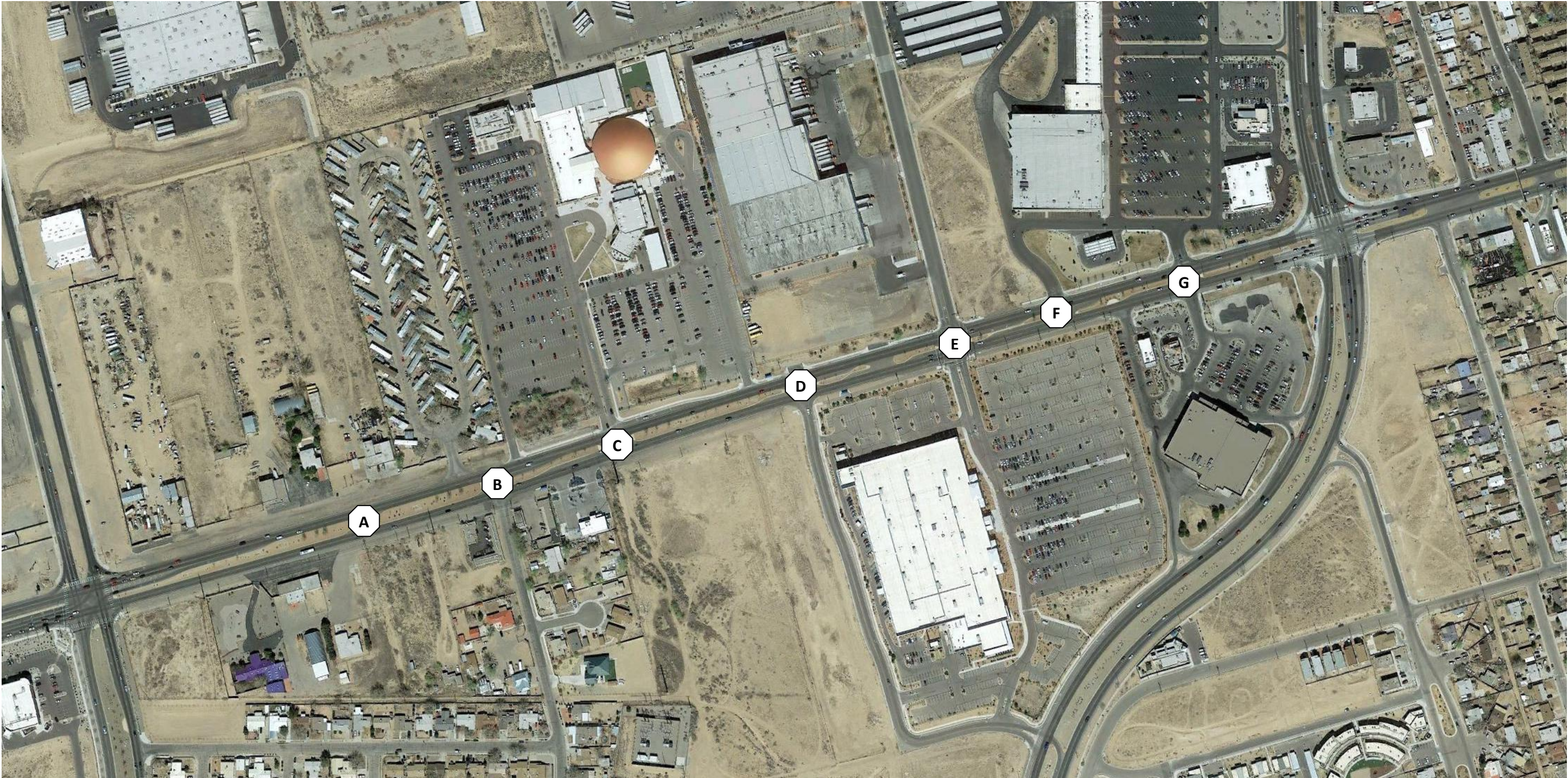


Figure 2: Unser Boulevard to Coors Boulevard

- A – Driveway (south side)

B – 75<sup>th</sup> Street (south side)

C – Legacy Church (north side)

D – Airport Drive SW (south side)
- E – Driveway (south side), Airport Dr. NW (north side)

F – Shopping Center (back access, north side)

G – Shopping Center (north and south sides)





Figure 3: Coors Boulevard to Coors Road

- |  |   |   |
|--|---|---|
| A – 65 <sup>th</sup> St. (south side)                      | F – Vacant Lot (north side), JB Auto Repair (south)                 | K – 58 <sup>th</sup> St. (north side), Apartments (south)         |
| B – 65 <sup>th</sup> St. (north side), H&D Tire (south)    | G – 61 <sup>st</sup> St. (south), Healthy Living club (north)       | L – AFD Emergency Access (north side)                             |
| C – 64 <sup>th</sup> St (north side), Sonic (south side)   | H – 60 <sup>th</sup> St. (north side), vacant lot (south side)      | M – 57 <sup>th</sup> St. (both sides)                             |
| D – 64 <sup>th</sup> St. (south side)                      | I – Estancia Dr. (north side), residence (south side)               | N – 55 <sup>th</sup> St. (south side), Body Piercing (north side) |
| E – 63 <sup>rd</sup> St. (north side), Palm Reader (south) | J – 59 <sup>th</sup> St. (south side), Laundromat/Pawn shop (north) | O – Yucca St. (north side), ?? (south side)                       |





Figure 3A: Coors Boulevard to Coors Road





Figure 4: Coors Road to Sunset Road

- |  |  |  |
|--|--|--|
| A – Coors Rd. (south), Dollar Store (north)                | F – 48 <sup>th</sup> St. (south), W. Central Storage (north) | K – Shopping Center (north and south sides)                                |
| B – 53 <sup>rd</sup> St. (north and south)                 | G – 47 <sup>th</sup> St. (north and south)                   | L – 40 <sup>th</sup> St. (north), 40 <sup>th</sup> St./Monte Carlo (south) |
| C – 52 <sup>nd</sup> St. (north), Mobile Home Park (south) | H – Pep Boys Auto (north), 46 <sup>th</sup> St (south)       |  |
| D – American Legion 72 (north, Vacant res (south)          | I – Shopping Center (north and south sides)                  |  |
| E – 50 <sup>th</sup> St. (north), Cypress St. (south)      | J – Shopping Center (north and south sides)                  |  |





Figure 4A: Coors Road to Sunset Road



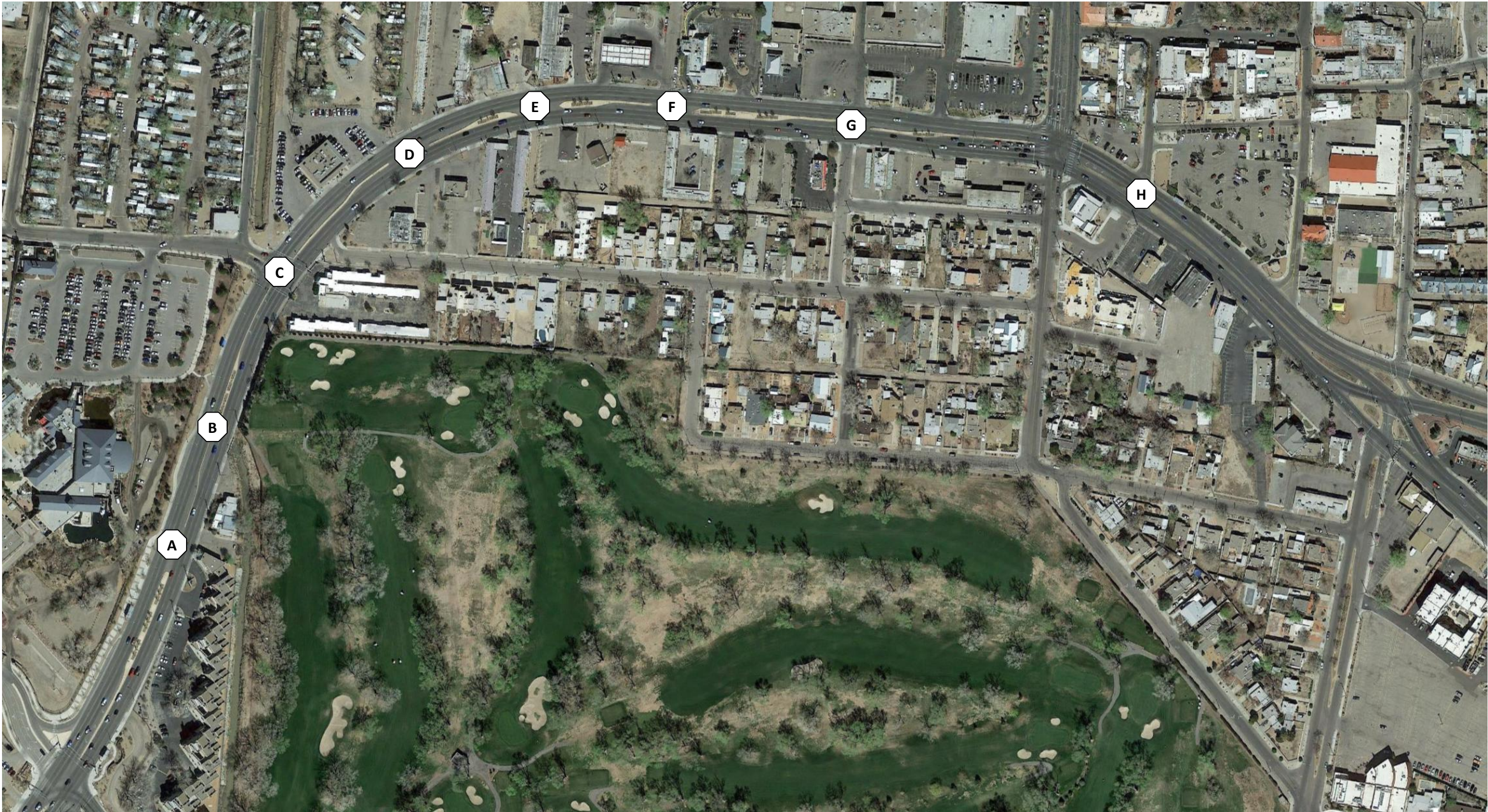


Figure 5: Tingley Dr. to San Pasquale

- A – Law Offices/The Beach Apartments (south)

B – Median Break (no access)

C – New York Ave. (north), El Vado Court (south)

D – Simonds St./Los Companeros Rest. (north), Vacant Bldg. (south)
- E – AAA Muffler (north), A Bit of Everything Market/Alley Access (south)

F – Ram Gas Station (north)

G– Shopping Center (north), Clayton St. (south)

H– Romero St. in Old Town Plaza (north), APD Substation (south)





Figure A5: Tingley Dr. to San Pasquale





Figure6: San Pasquale to 10<sup>th</sup> St.





Figure6A: San Pasquale to 10<sup>th</sup> St.



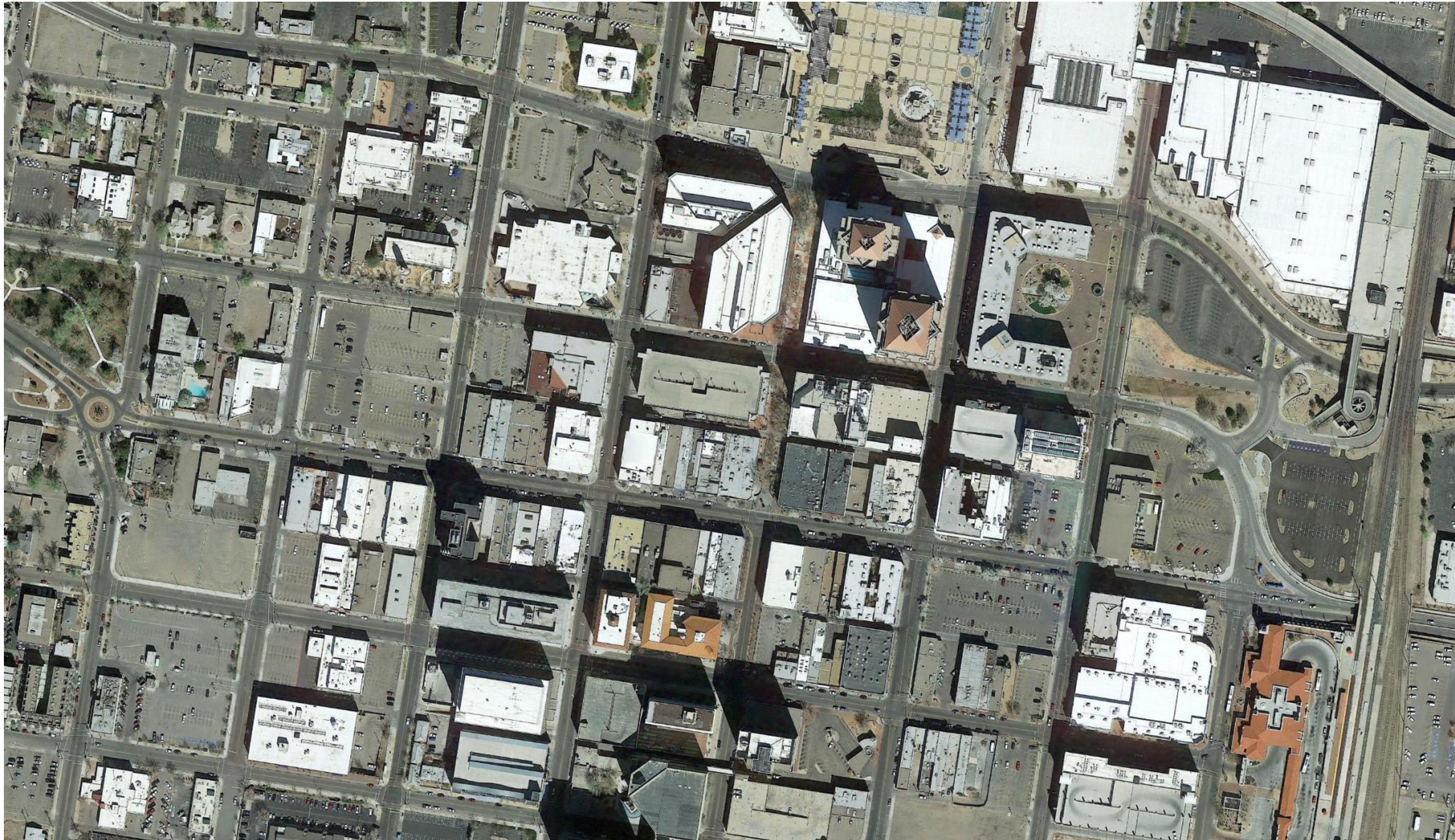


Figure 7: Downtown -- 10<sup>th</sup> St. to 1<sup>st</sup> St.





Figure 8: 1<sup>st</sup> St. to I-25

- |                                   |                                  |
|-----------------------------------|----------------------------------|
| A – Union Square St. (south)      | D – Walter St. (north and south) |
| B – Arno St. (north and south)    | E – High St. (north and south)   |
| C – Edith Blvd. (north and south) | F – Elm St. (north and south)    |





Figure 8A: 1<sup>st</sup> St. to I-25



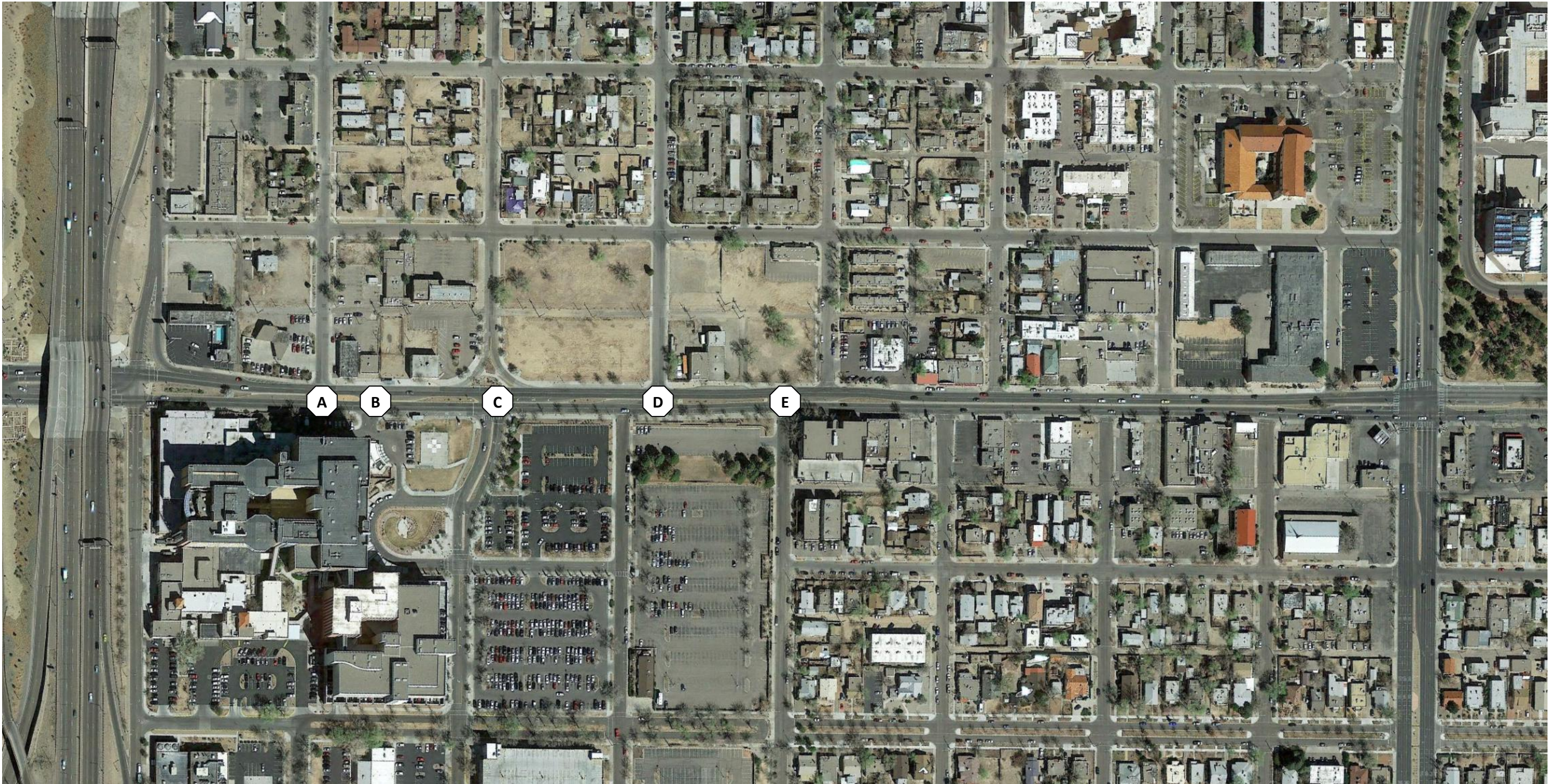


Figure 9: I-25 to University Blvd

- A – Mulberry St. (north)
- B – Presbyterian Ambulance Entrance (south)
- C – Cedar St./Presbyterian Hospital (south)
- D – Spruce St. (north)
- E – Sycamore St. (south)



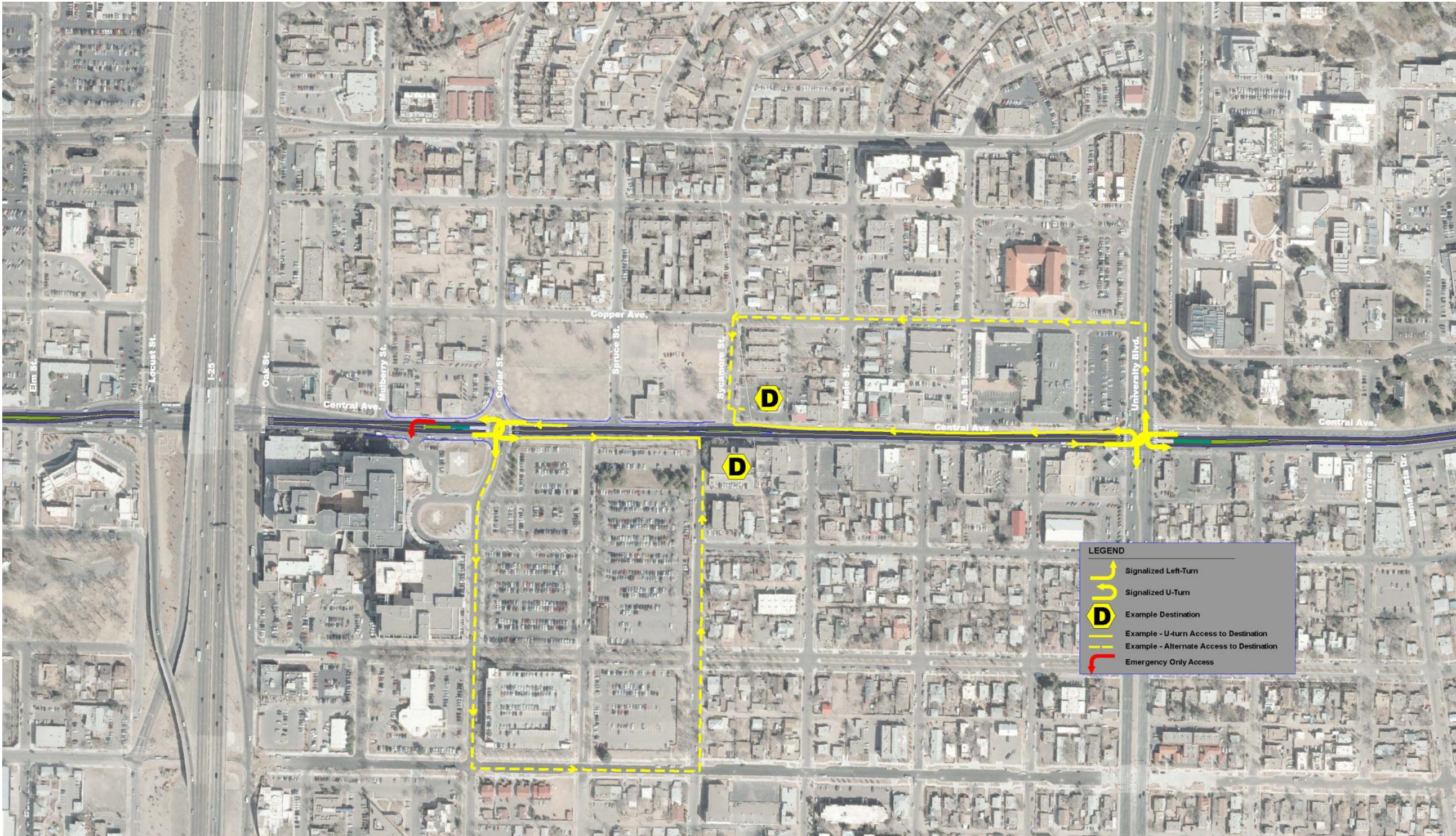


Figure 9A: I-25 to University Blvd





Figure 10: University Boulevard to Girard Boulevard

- |                             |   |
|-----------------------------|---|
| A – Mesa St. (south)        | F – Stanford Dr. to UNM (north), Stanford Dr. (south) |
| B – Terrace St. (south)     | G – Columbia Dr. (south)                              |
| C – Buena Vista Dr. (south) | H – Princeton Dr. (south)                             |
| D – Harvard Dr. (south)     | I – Vassar Dr. (south)                                |
| E – Cornell Dr. (south)     |   |





Figure 10A: University Boulevard to Girard Boulevard





**Figure 11: Girard Boulevard to Carlisle Boulevard**

- |                                     |                                   |
|-------------------------------------|-----------------------------------|
| A – Dartmouth Dr. (north and south) | E – Tulane Dr. (north and south)  |
| B – Richmond Dr. (north and south)  | F – Amherst Dr. (north and south) |
| C – Bryn Mawr Dr. (north and south) |                                   |
| D – Wellesley Dr. (north and south) |                                   |





Figure 11A: Girard Boulevard to Carlisle Boulevard



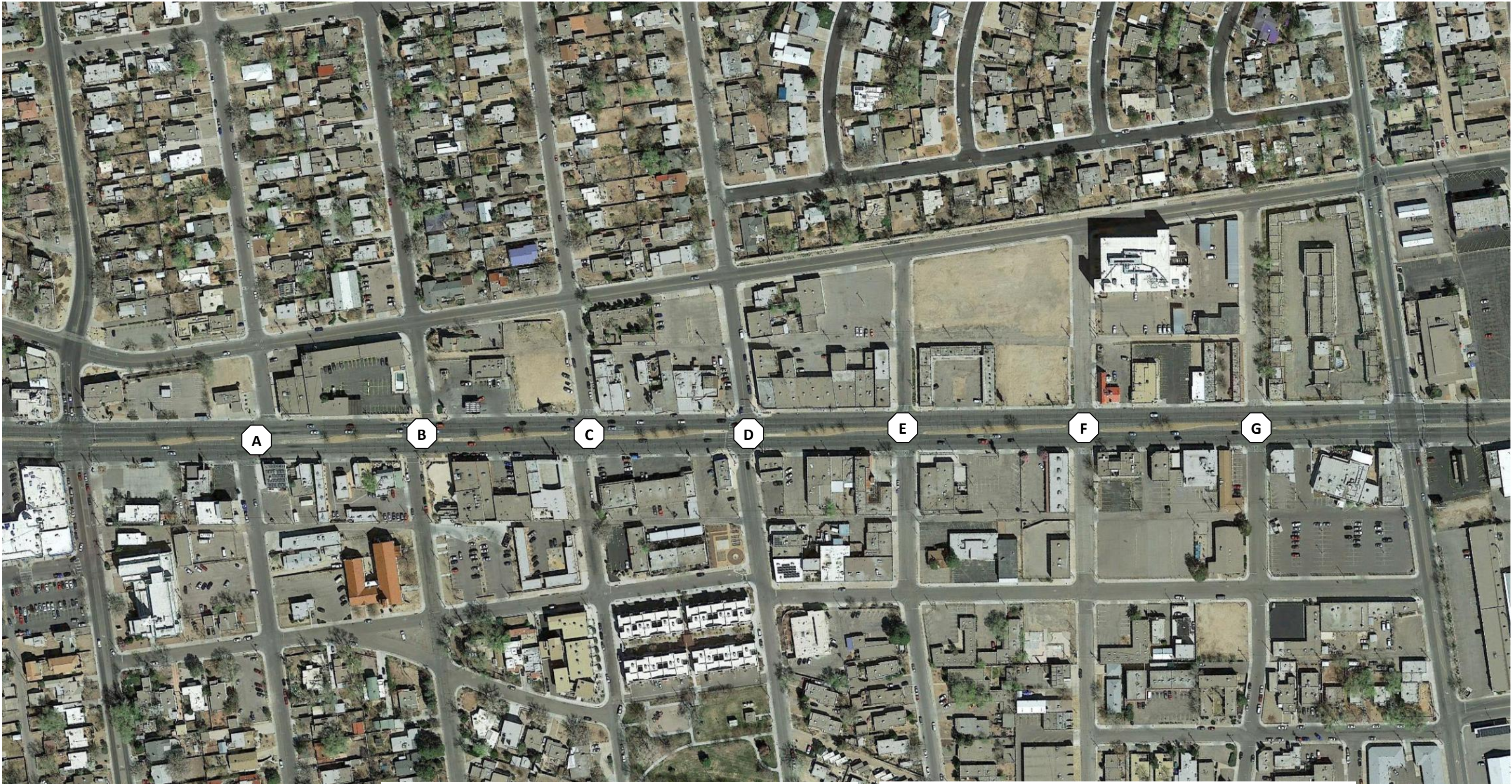


Figure 12: Carlisle to Washington

- |   |                                     |
|---|-------------------------------------|
| A – Hermosa Dr./Planned Parenthood (north), Hermosa Dr. (south) | E – Montclair Dr. (north and south) |
| B – Solano Dr. (north and south)                                | F – Sierra Dr. (north and south)    |
| C – Aliso Dr. (north and south)                                 | G – Graceland Dr. (north and south) |
| D – Morningside Dr. (north and south)                           |                                     |



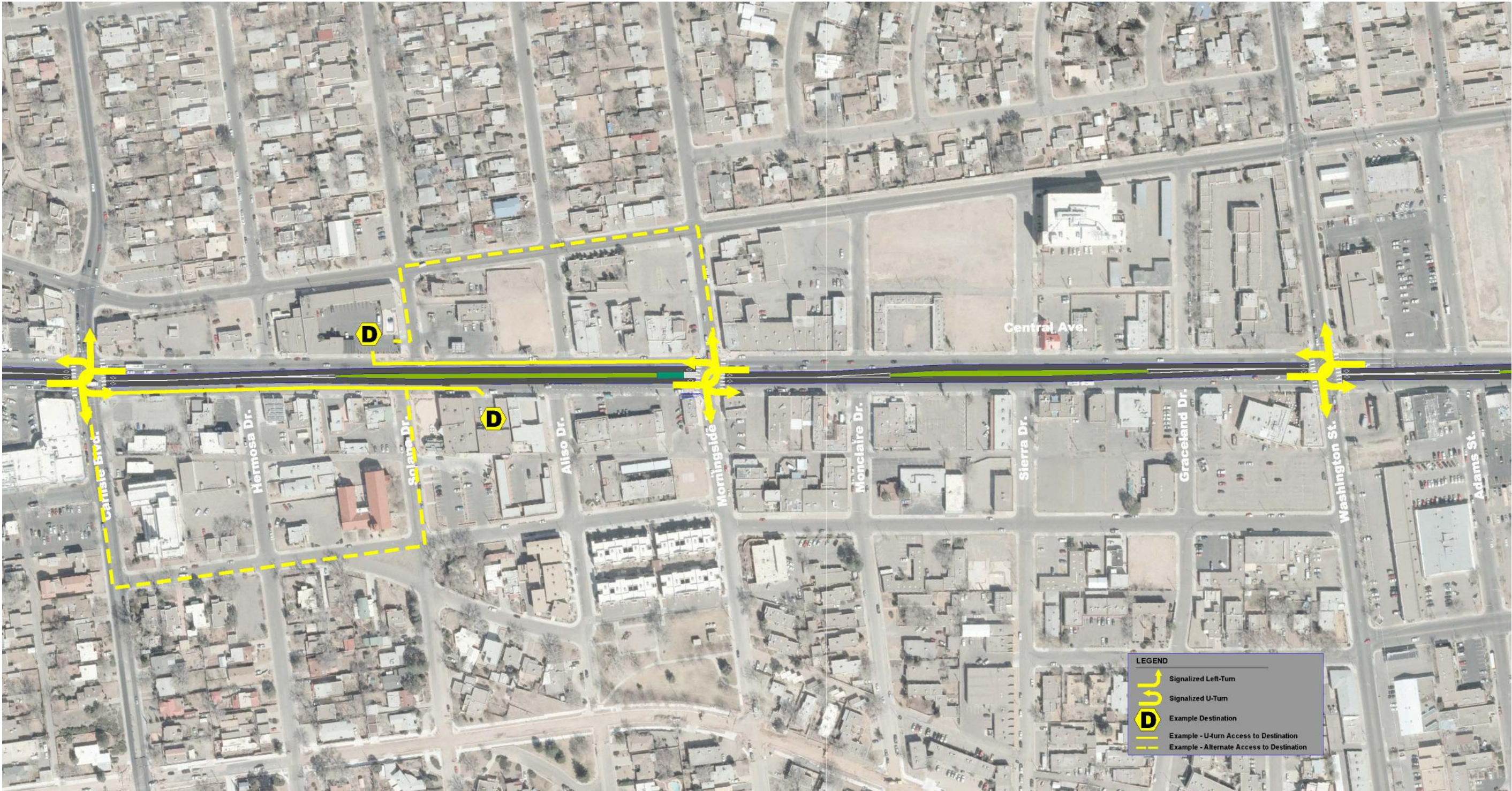


Figure 12A: Carlisle to Washington





Figure 13: Washington to San Mateo

- |                                     |   |
|-------------------------------------|---|
| A – Adams St. (north and south)     | E – Quincy St. (north and south)                    |
| B – Jefferson St. (north and south) | F – Jackson St. (north and south)                   |
| C – Madison St. (north and south)   | G – Manzano St. (north), Long John Silver’s (south) |
| D – Monroe St. (north and south)    | H – Truman St. (north), Castle/Title Max (south)    |



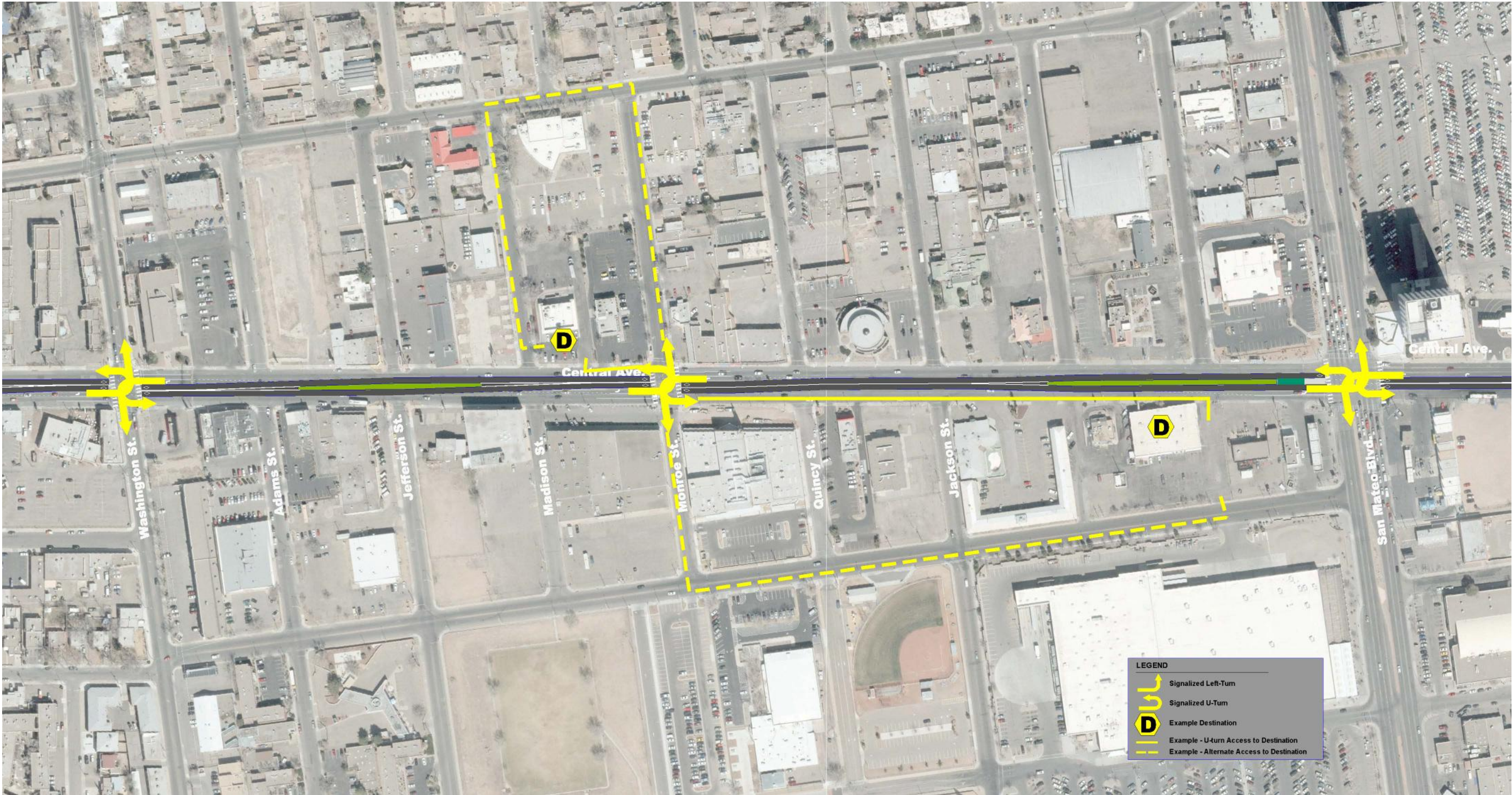


Figure 13A: Washington to San Mateo





Figure 14: San Mateo to San Pedro

- |                                   |                                    |  |
|-----------------------------------|------------------------------------|--|
| A – Vacant Lot (south)            | D – Palomas Dr. (north)            | G – Cardenas Dr. (north), Auto Zone (south)              |
| B – Madeira Dr. (north and south) | E – Alvarado Dr. (north and south) | H – Laguyra Dr. (north), Shopping Center Parking (south) |
| C – La Veta Dr. (north)           | F – Valencia Dr. (north and south) | I – Cagua Dr. (north), Shopping Center Parking (south)   |





Figure 14A: San Mateo to San Pedro





Figure 15: San Pedro to Louisiana

- A – California St. (north and south)

B – Bombay Spice/Inca Silver (south)

C – Florida St. (south)
- D – Luxury Inn (south)

E – Expo NM Entrance (north), Indiana St. (south)





Figure 15A: San Pedro to Louisiana





Figure 16: Pennsylvania Ave. Intersection

- A – Dallas St. (north and south)
- B – Rhode Island St. (north and south)

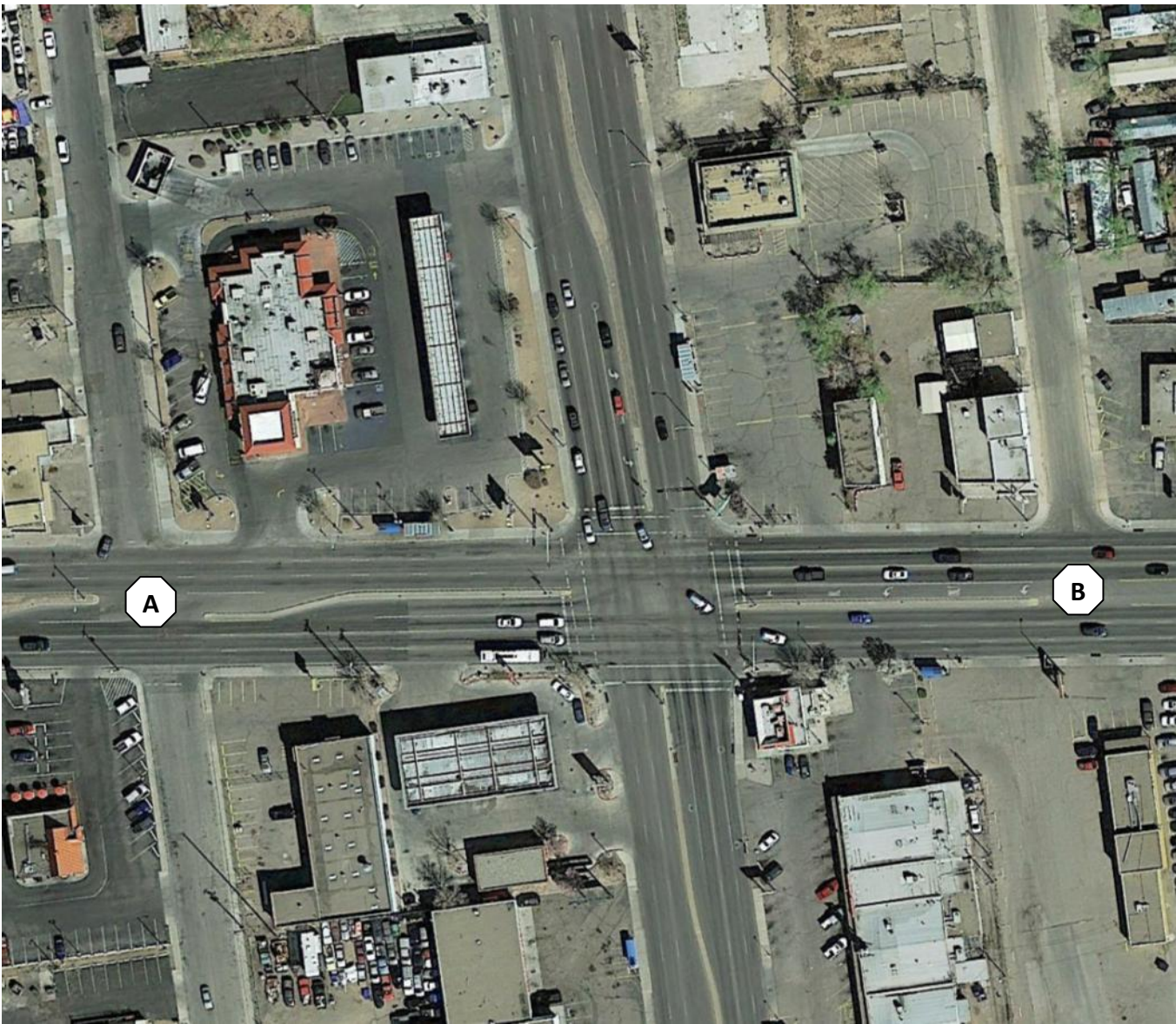


Figure 17: Wyoming Blvd. Intersection

- A – Wisconsin St. (north and south)
- B – General Marshall St. (north), Hilson’s Western Wear (south)





Figure 18: Eubank Blvd. Intersection

- A – Glorieta St. (north)
- B – Private Residences (north) Home Depot (south)



Figure 19: Juan Tabo Blvd. Intersection





Figure 20: Dorado Place to Tramway Blvd. Intersection

A – McDonald’s (north)